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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,336	02/28/2002	Dieter Kerner	032301.606	5608

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WASHINGTON, DC 20036

EXAMINER

ZIMMER, MARC S

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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06/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/084,336

Applicant(s)

KERNER ET AL.

Examiner

MARC S. ZIMMER

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008 and 01 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7, 8 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 8 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

At the outset, it is noted that the only meaningful modification of the claims in Applicants' November 19, 2008 response to the August 8, 2008 final rejection was the replacement of the word "effective", as in "effective amount of ...oxides" with "reinforcing". It is recognized that this perhaps represents a narrowing of the claim in the sense that "effective amount" may connote different quantities depending on the effect sought whereas the claims, as now written, mandate that there is a reinforcing amount of the filler and this amount may be different than the amount necessary to impart some other effect other than a reinforcing effect. It is for this reason that the Examiner deems it inappropriate to finally reject the claims with this Office action. On the other hand, the reinforcement of the polymer host is possibly the most widespread role for oxide fillers when incorporated into polymer formulations and, thus, the stipulation that the amounts are added are reinforcing quantities hardly constitutes a foundation for removal of the art of record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangold et al., JP 2000-169132 in view of the teachings taken from Chapter 6 of the volume entitled *Handbook of Fillers*, 2nd Edition authored/edited by Wypych, Herzig, U.S. Patent # 4,101,499, Penneck, U.S. Patent # 4,001,128, and Cyprien Guy et al.,

U.S. Patent # 4,886,661 for the reasons established earlier. See, for instance, the Examiner's August 25, 2006 correspondence.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hemme et al., U.S. patent Application Publication No. 2002/0018741 in view of the teachings taken from Chapter 6 of the volume entitled *Handbook of Fillers, 2nd Edition* authored/edited by Wypych, Herzig, U.S. Patent # 4,101,499, Penneck, U.S. Patent # 4,001,128, and Cyprien Guy et al., U.S. Patent # 4,886,661 for the reasons established earlier.

Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangold et al., JP 2000-169132 in view of the teachings taken from Chapter 6 of the volume entitled *Handbook of Fillers, 2nd Edition* authored/edited by Wypych, Herzig, U.S. Patent # 4,101,499, Penneck, U.S. Patent # 4,001,128, and Cyprien Guy et al., U.S. Patent # 4,886,661 as applied to claims 13-16 above and also in view of Lentz, U.S. Patent # 3,122,520 for the reasons established earlier. Applicant is encouraged to review, in addition to the August 25, 2006 Office action, the December 12, 2006 correspondence and, in particular, the analysis of the patentability of claim 4 inasmuch as present claim 16 largely mirrors the subject matter of claim 4, now cancelled.

To summarize the Office position, the doped, pyrogenically-produced oxides of the instant invention had already been previously described in the aforementioned document that shares at least one common author with the instant application. It is

further contemplated therein that the oxides may be employed as fillers/additives in a polymer matrix but *Mangold* fails to mention the treatment of the oxide surface with an organosilicon compound. Nevertheless, it is extremely widely documented that oxide fillers are advantageously treated with reagents like those advocated by Applicant to render their surfaces more hydrophobic/non-polar/organophilic. *Wypych, Herzig, Penneck*, and *Cyprien Guy* are merely a tiny sampling of the vast number of disclosures that recommend the treatment of oxide fillers where they are blended into a polymer material. As a desirable outcome of this treatment, the filler particles are less susceptible to aggregating inside the polymer host and, thus, any number of properties of the filled polymer are improved over an analogous composition where the oxide particles have been left untreated (including those alleged by Applicant to be unexpectedly enhanced). Though not formally included in the statement of rejection, *Caradori, Eguchi, Bergstrom, Burns, Canpoint*, and *Lutz* were offered into evidence in the October 19, 2007 advisory action to disprove Applicants' assertion that the realization of improved properties including optical and rheological properties by treating the oxide fillers with an organosilicon compound would have been unexpected. The art of record shows unfailingly that (i) the oxide fillers being claimed were known, (ii) the incorporation of said fillers into polymer hosts is cited as an application of the fillers, (iii) the treatment of fillers with organosilicon reagents to facilitate uniform dispersion (and, in the case of a siloxane host, to prevent structuring/crepe hardening) is generally advocated, and (iv) the ability to uniformly disperse the filler has broader implications for

the improvement of the properties of the filled polymer including those purported to be unexpectedly improved by Applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC S. ZIMMER whose telephone number is (571)272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 25, 2009

/Marc S. Zimmer/
Primary Examiner, Art Unit 1796